

Introduction

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The Medfly, *Ceratitis capitata* (Wied.) is a major pest all over the world on as many 200 tropical and subtropical fruit species. In the Mediterranean basin. The pest attacks citrus, deciduous (mainly stone fruits) and other cultivated hosts.

From practical point of view, it is very risky to depend on chemical pesticides in controlling such pests as larvae live most of their life-cycle inside the infested fruits and pupae are present under the soil surface. Biological control methods offer alternative choices to the use of unsuccessful pollutant chemicals. Among biological control agents, the entomopathogenic nematodes seemed to be the most appropriate weapon for controlling this serious pest in soil.

Entomopathogenic nematodes related to the families Steinernematidae and Heterorhabditidae are regarded as being excellent biological control agents for soil inhabiting insects including *C. capitata*. They have many positive attributes including their broad host range, safe to non-target organisms, including parasitoids and predators, and safe to the environment. These nematodes have the ability to search for hosts (killing them rapidly), the ability to recycle in the environment and the compatibility with other biological control agents as well as with pesticides.

Recently, entomopathogenic nematodes could be isolated from the Egyptian environment. The Egyptian nematode isolates are expected to be more tolerant than the introduced ones to severe climatic conditions as high temperature, drought and sun radiation.

The present work deals with the efficiency of four nematode species in controlling *C. capitata*.